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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,094	01/04/2002	Gerald M. Clum	124252.2	8851

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EXAMINER

HWU, DAVIS D

ART UNIT PAPER NUMBER

3752

DATE MAILED: 01/12/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/040,094

Applicant(s)

CLUM ET AL.

Examiner

Davis Hwu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 11-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 31-41, 43 and 44 is/are rejected.
- 7) ☒ Claim(s) 42 and 45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-10, 31-41, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay in view of Jackson.

The patent to Lindsay discloses vacuum system for removing water from a field, the system comprising:

- a vessel 9 for collecting fluid, the vessel having a fluid inlet aperture, a fluid egress aperture, and an air egress aperture;
- a vacuum pump 45 for generating a stable reduced pressure within the vessel, having a first conduit 44 for withdrawing air from the vessel, the first conduit being in fluid connection to the vessel at the air egress aperture, and a second conduit 44 for expelling the air withdrawn from the vessel (see Figure 2);
- a connector provided by conduit 8 for fluidly linking the vessel to the field, the connector having a first and second end, the first end linked to the vessel at the fluid inlet aperture, and second end having a fitting for linking to the field;
- a filter 47 as recited in claim 35.

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Lindsay does not disclose the vacuum system being used in a fire safety system. The patent to Jackson teaches an underground installed fire safety system. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the device of Lindsay to remove water from an underground installed fire safety system taught by Jackson. Regarding claims 5 and 6, it would have been obvious to one having ordinary skill in the art that the pressure within the vessel be within the range of tolerances of the components for safety purposes and that the pump comprises a motor and a piston assembly. Claims 4 and 7-10 and the pressure recited in claim 35 are matters of design choice depending on the required capacity of the vacuum system and the desired fitting method. The device of Lindsay and Jackson is capable of carrying out the methods as recited in claims 31-33 and the method as recited in claim 34 is a matter of user preference in order to attach the vacuum system to the fire safety system. Also, one having ordinary skill in the art would recognize that the second conduit could also vent to the atmosphere as recited in claim 35 and using a fan assembly for the pump as recited in claim 37 is a design choice depending on preferences.

3. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay in view of Jackson as applied to claim 1 above, and further in view of Borovina et al.

The patent to Borovina teaches a water holding tank PH having a pressure gauge 35 to provide an indication of the pressure within the tank and a pressure relief valve 36 for relieving excess pressure from the tank. It would have been obvious to one having

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ordinary skill in the art at the time the invention was made to have modified the device of Lindsay and Jackson by incorporating a pressure gauge and a pressure relief valve as taught by Borovina et al. for the reasons stated above.

***Allowable Subject Matter***

4. Claims 42 and 45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

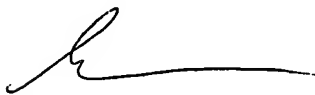
***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Nagano Pump KK is pertinent to Applicant's invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis Hwu whose telephone number is 703-305-1663. The examiner can normally be reached on M-F 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Y. Mar can be reached on (703)308-2087. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0861.



Davis Hwu